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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,668	01/14/2004	John Carberry	29378.00	4473
32042	7590	03/12/2007		
PATTON BOGGS LLP 8484 WESTPARK DRIVE SUITE 900 MCLEAN, VA 22102			EXAMINER SOLANKI, PARIKHA	
			ART UNIT	PAPER NUMBER
			3737	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/757,668

**Applicant(s)**

CARBERRY, JOHN

**Examiner**

Parikha Solanki

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/14/04, 2/22/07, 2/23/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted on 22 February 2007 and 23 February 2007 were filed after the mailing date of the application for patent on 14 January 2004. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

### ***Oath/Declaration***

2. The oath or declaration is defective because it does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordstrom et al (US Patent No. 6,427,082), hereinafter Nordstrom ('082), in view of Everett et al (6,3084,915), previously cited by Applicant, hereinafter Everett ('915).

Regarding claims 1-6, 12-16, 21, 22, 24, 25, 31-32, 34, 35, 42-44, 46-49, 53-58 and 63-67, Nordstrom ('082) teaches an optical screening device, and a method for using the device, wherein the device includes a plurality of optical inputs (col. 5 lines 33-42), a plurality of optical

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outputs (col. 6 lines 18-20), a plurality of diagnostic fibers (col. 5 lines 54-58), and first, second and third switches (Fig. 1 elements 11, 14 and 17) as claimed in the instant application. Nordstrom ('082) additionally provides a controller for all switches (col. 6 lines 39-46). As the source of Nordstrom ('082) must be optically connected to the diagnostic fibers in order for the system to be functional, it follows that such a connection must exist, and it constitutes an optical junction as claimed in the instant application.

The system of Nordstrom ('082) fails to include a catheter, a conduit, and a mirror at the end of the diagnostic fibers. In the same problem solving area, Everett ('915) provides a catheter based optical sensing system (Abstract) for navigating blood vessels, which includes a catheter tube for angioplasty balloon insertion (col. 6 lines 17-21). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Nordstrom ('082) to include the catheter and tube of Everett ('915), in order to adapt the system for interventional cardiovascular applications.

Regarding claims 7, 8, 17, 18, 26, 27, 36, 37, 41, 5, 51, 59 and 60, Nordstrom ('082) fails to provide an optical circulator as the optical junction. Everett ('915) teaches that a circulator is beneficial for optically isolating the source and enhancing system sensitivity (col. 4 lines 20-28). Additionally, the circulator taught by Everett ('915) constitutes an optical dead-end as claimed in the instant application. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of Nordstrom ('915) to further include an optical circulator, in view of the teachings of Everett ('915).

Regarding claims 9-~~10, 20~~, 19, 20, 28-30, 38, 39, 40, 41, 52, 61 and 62, neither Nordstrom ('082) nor Everett ('915) teach the inclusion of a treatment laser and an optical fiber for delivering the treatment laser. However, in the specification of the instant application, Applicant admits that it is known in the art to include excimer laser treatment means in optical diagnostic catheter systems (§ 0008). It would then have been obvious to one of ordinary skill in the art at the time of invention to further modify the system of Nordstrom ('082), previously modified by Everett ('915), to include a fiber and source for laser treatment, and to modify the controller and switches appropriately to protect the source input from harmful reflections of the treatment laser source, in view of the teachings of Everett ('915) and Applicant's admitted prior art.

Regarding claims 23, 33 and 45, Nordstrom ('082) additionally fails to provide a mirror disposed at an angle of substantially 45° at the end of the diagnostic fibers. Everett ('915) teaches an embodiment of the reference invention wherein the diagnostic fibers terminate in a

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mirror angled at 45 degrees in order to maintain polarization of the source light. It would have been obvious to one of ordinary skill in the art at the time of invention to include the mirror of Everett ('915) in the invention of Nordstrom ('082) in order to maintain polarization of the input source light at the end of the diagnostic fiber.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha Solanki whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Parikha Solanki

Examiner – Art Unit 3737



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